Gulf of Mexico Alliance Multi-state Data Requirements

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Presented to: Coastal Engineering Research Board 86th Meeting
2009 June 03, San Diego, California

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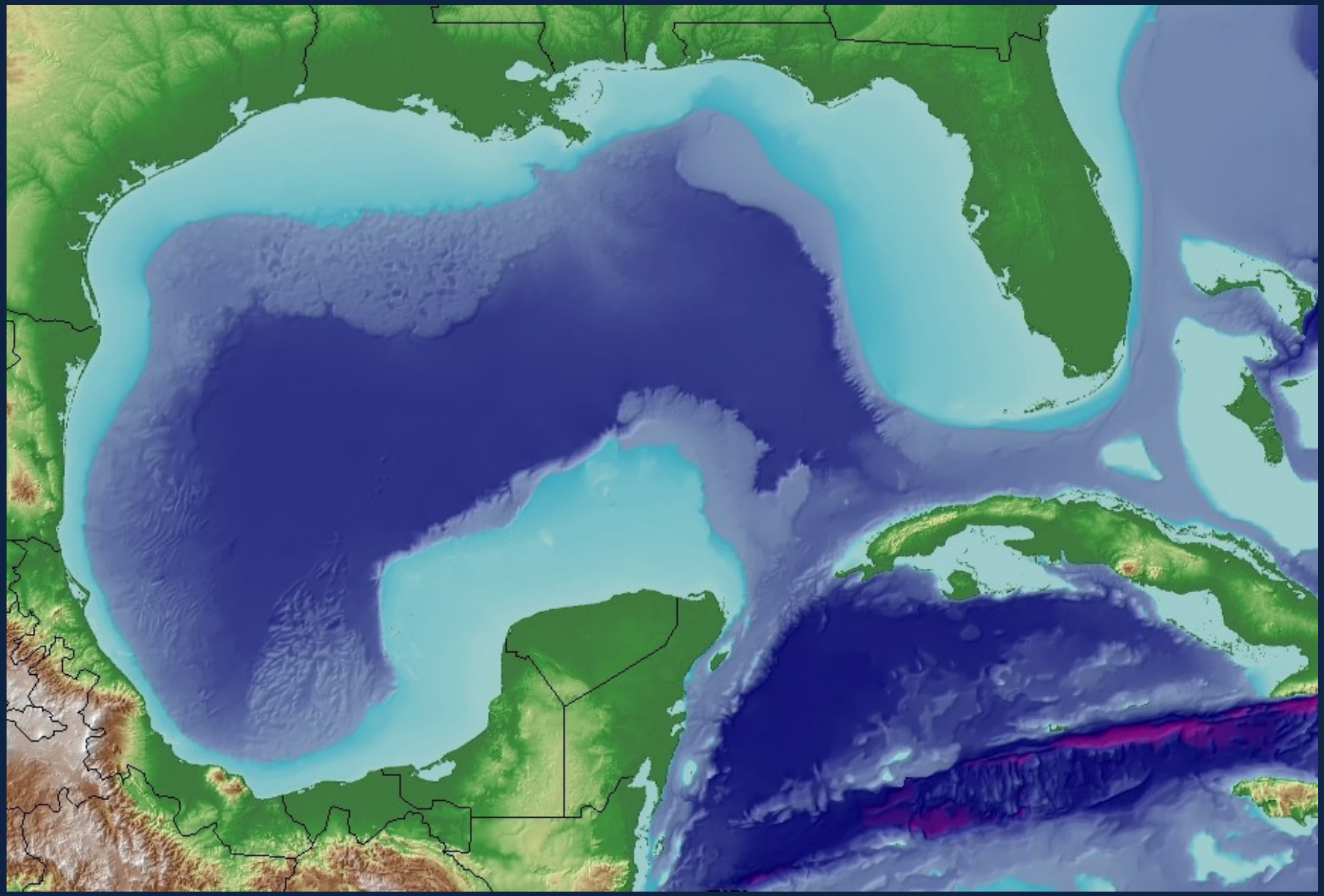

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History of Gulf of Mexico Alliance

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Alliance Partners (State and Federal)

State Agencies

AL Department of Conservation and Natural Resources
AL Department of Environmental Management
AL Department of Public Health
FL Department of Environmental Protection
FL Fish and Wildlife Conservation Commission
LA Department of Education
LA Department of Environmental Quality
LA Department of Natural Resources
LA Department of Wildlife and Fisheries
LA Office of Coastal Restoration and Management
MS Department of Environmental Quality
MS Department of Marine Resources
TX Commission on Environmental Quality
TX General Land Office
TX Parks and Wildlife Department

Federal Agencies

Council on Environmental Quality
National Aeronautics and Space Administration
National Science Foundation
U.S. Army Corps of Engineers
U.S. Department of Agriculture
U.S. Department of Commerce, NOAA
U.S. Department of Defense
U.S. Department of Energy
U.S. Department of the Interior
U.S. Department of Health and Human Services
U.S. Department of State
U.S. Department of Transportation
U.S. Environmental Protection Agency

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Building Partnerships for a Healthier Gulf

GULF OF MEXICO ALLIANCE

Water Quality ◆ Nutrients ◆ Ecosystems ◆ Education ◆ Restoration ◆ Resilience

GOVERNORS' ACTION PLAN II

For Healthy and Resilient Coasts

2009 - 2014

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Action Plan II Addresses Four Major Challenges:

1. Sustaining Gulf Economy
2. Improving Ecosystem Health
3. Mitigating Impacts of Adapting to Climate Changes
4. Mitigating Harmful Effects to Coastal Water Quality

Alliance Issues of Regional Significance:

- Water Quality for Healthy Beaches and Seafood (Florida)
- Habitat Conservation and Restoration (Louisiana)
- Ecosystems Integration and Assessment (Texas)
- Reducing Nutrient Impacts to Coastal Ecosystems (Mississippi)
- Coastal Community Resilience (Mississippi and Louisiana co-lead)
- Environmental Education (Alabama)

Water Quality for Healthy Beaches
Focus Areas:

1)Pathogens

2)Harmful Algal Blooms (HAB)

3)Mercury in Seafood

4)Monitoring

Water Quality for Healthy Beaches Data Requirements:

1) Better methods to ID pathogens and track sources
2) Near real-time monitoring network and public information system for pathogens
3) Near real-time monitoring to detect, track, and forecast HABS: satellite imagery, buoys, field samples
4) Standardized water quality data collection and reporting

Habitat Conservation and Restoration Focus Areas:

1)Expanded Partnerships

2)Policy Changes

3)Technology Development

4)Gulf Regional Sediment Management Master Plan

5)Reversing the Downward Trend in Habitat and Ecosystem Services

Habitat Conservation and Restoration Data Requirements:

1) Sediment inventories
2) Sediment budgets
3) Dredging activities
4) Restoration project monitoring data
5) Data on economic value of habitats
6) Standardized Geospatial database of habitat including restoration projects across the Gulf

Ecosystems Integration and Assessment
Focus Areas:

1)Gulf of Mexico Master Mapping Plan (GMMMP)

2)Data Access and Acquisition

3)Living Marine Resources

4)Emergent Wetlands Status and Trends Report

5)Ecological Services Valuation

Ecosystem Integration and Assessment Data Requirements:

1) Information on recent and planned mapping data (type and coverage)
2) Legacy ecosystem-related geospatial data and reports for ongoing trend analysis of ecosystem change
3) Current habitat geospatial data in a standard classification system such as the Coastal and Marine Ecological Classification Standard (CMECS)
4) Economic values of ecosystem services

Reducing Nutrient Impacts to Coastal Ecosystems
Focus Areas:

1)Nutrient Characterization

2)Nutrient Criteria Development

3)Hypoxia

4)Nutrient Reduction Strategies

Reducing Nutrient Impacts to Coastal Ecosystems
Data Requirements:

1) Routine and standardized water sampling for nutrients
2) Freshwater inflow amounts and character to coastal zones
3) Flow and nutrient data for drainage basins
4) Circulation data and models
5) Socioeconomic data to assess impacts of excess nutrients

Coastal Community Resilience Focus Areas:

1)Risk and Resilience Assessment

2)Risk and Resilience Management Toolbox

3)Risk and Resilience Communication

Coastal Community Resilience Data Requirements:

1) Relative sea-level change: long-term and detailed time series of land elevations and water levels
2) Detailed topographic lidar data of the coastal plain
3) Shoreline change and storm impacts: time series of shoreline lidar and photography data including post-storm surveys
4) Data on hazard mitigation projects and their status: e.g., levees and seawalls
5) Socioeconomic data

Environmental Education Focus Areas:

1)Community Education and Outreach

2)Public Awareness

3)K through 20 Environmental Literacy

4)Economic Value Communication

Data Requirement “Themes”

1) Economic data for valuing the natural environment in terms of ecosystem services
2) Standard measures: water parameters and habitat classification
3) Data update frequency
    1) Real time or near real time: water quality, HAB, storm impacts
    2) One to five years: elevation, topography, bathymetry, restoration project monitoring, environmental permitting activities
    3) Five to ten years: status and trends of coastal habitats
4) Information system: Regional Ecosystem Data Management (REDM) (NOAA’s National Coastal Data Development Center)